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very good

An Essay

on the  
History, Symptoms, Causes  
and  
Treatment  
of

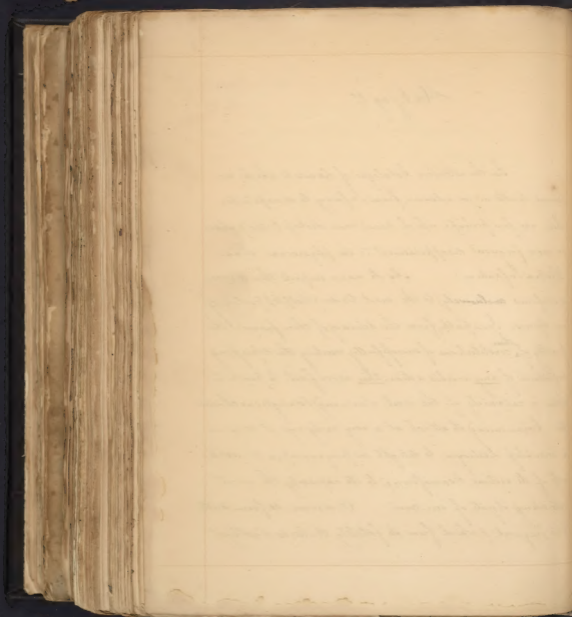
Cholera Infantum

By  
J. M. Faulcon  
of  
Virginia

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An Essay &c.

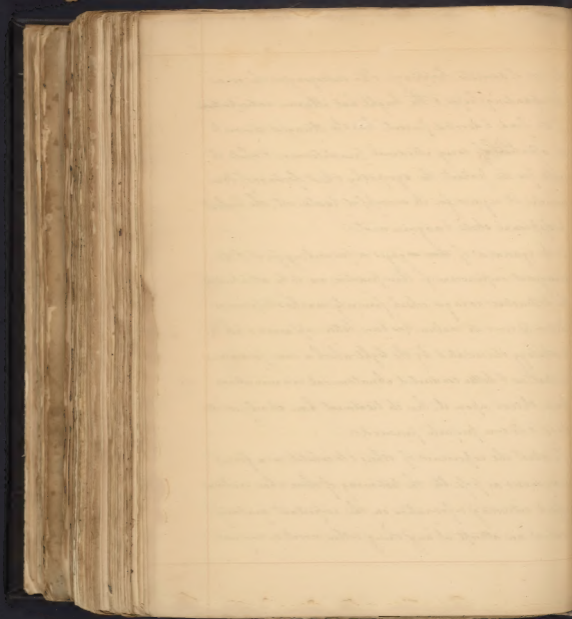
In the extensive catalogue of diseases to which we become liable as we advance from Infancy to decrepitude, there are few perhaps, which cause more distress to the patient or more frequent disappointment to the physician, than Cholera Infantum? As its name imports, this disease is confined ~~exclusively~~ to the most tender & helpless portion of our species. Incapable, from the delicacy of their frames & the frailty of <sup>their</sup> constitutions of successfully resisting the depressing influence of any morbid action, this never fails to prove to them a calamity of the most alarming & dangerous character. Commencing its attack at a very early age, it seems as a merciless Destroyer, to delight in preying upon the weakness of its victims & sacrificing to its rapacity, the most interesting objects of our care. A disease so formidable & so frequent, & which from its fatality strikes so directly at



the rest of domestic happiness, often destroying in the germ the expanding hopes & the bright but illusive anticipations of the fond & devoted parent, has the strongest claims to the attention of every Medical practitioner & while it excites for the patient, the sympathy & best feelings of Humanity, it requires for its successful treatment, the highest professional skill & acquirements.

To the ignorance of those engaged in prescribing for it, & the consequent empiricism of their practice, are to be attributed the destructive ravages which formerly marked its presence. And only since its nature has been better explained, & its pathology elucidated by the light which a more judicious observation & better conducted Anatomical examinations have thrown upon it, has its treatment been clearly understood & its cure properly pursued.

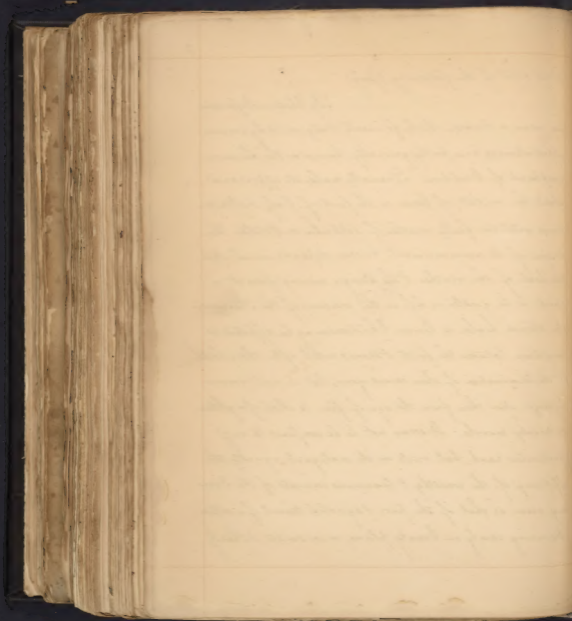
To detail the experience of others & to exhibit in a form as condensed as possible, the testimony of those whose writings afford interesting information on this important malady, without an attempt at any thing either novel or original,



is the object of the following Essay.

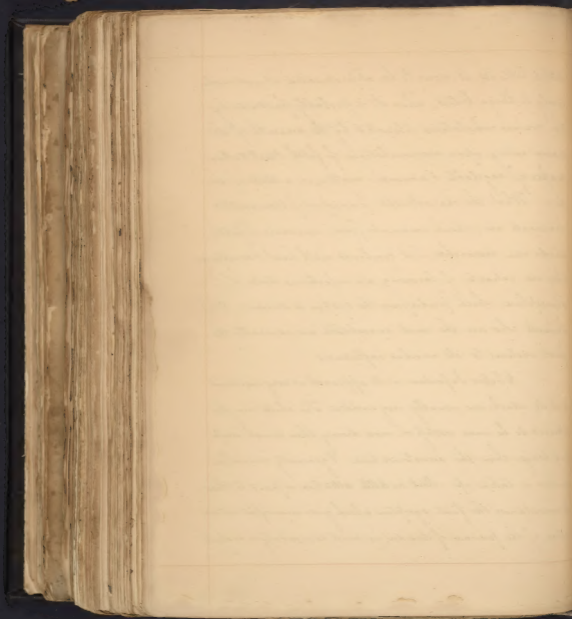
By Cholera Infantum,

we mean a disease, which formerly designated by various appellations, is now pretty generally known as the "Summer complaint of Children." It usually makes its appearance about the middle of June or the first of July, & often continues until the frosty weather of September or October. The period of its commencement however depends much upon the heat of the weather: & the danger arising from it is said to be greater or less, as the mercury of the Thermometer stands higher or lower. Children may be affected at any time between the first & second week after their birth & the termination of their second year, but it most commonly seizes upon them from the age of five to that of eighteen or twenty months. It seems not to be confined to any particular rank, but visits in its malignity equally the offspring of the wealthy & luxurious inmate of the Drawing-room, as that of the poor & equalled tenant of a cellar. Occurring rarely in Country places, or in small & thinly



settled villages, it seems to be appropriated almost exclusively to large cities; where it is probably produced by the noxious exhalations liberated by the warmth of the season acting upon accumulations of filth & dirt & upon masses of vegetable & animal matter, in a state of decay. What the characteristic principles of these subtle materials are, which emanate from reservoirs of filth, eludes our researches; but combined with heat & moisture they are capable of forming an infectious state of atmosphere which predisposes the system to disease; & Infants who are the most susceptible are generally the first victims to its morbid influence.

Cholera Infantum in its approach is very insidious and its attacks are usually very sudden. The child may be observed to be more restless or more drowsy than usual, sleeping longer than the accustomed time, & generally cries when moved or taken up. But as little attention is paid to these circumstances the first symptom which gives manifest indication of the presence of disorder, is most commonly a violent



vomiting accompanied by the usual phenomena of febrile  
 excitement. Sometimes the disease commences with Diarrhaea,  
 which continues for several days without exhibiting any  
 other mark of indisposition. Frequently however, the vomit-  
 ing & purging become simultaneous. This seldom is found  
 to be most generally the case. They often alternate; but  
 commonly, the former soon ceases & the latter continues thro-  
 ughout the disease. The matter thrown up from the Stomach  
 at first consists, of nothing more than the maternal milk  
 or other food in a state of acidity, sometimes mixed with  
 slime or glairy mucus which continues to be ejected, after  
 the alimentary matter is evacuated. The alvine discharges  
 are at first composed principally of a thin, watery, yellow  
 or greenish fluid, with occasional lumps of fecal matter,  
 sometimes they are of greater consistence & of more natural  
 appearance. Sometimes are accompanied by a copious flow  
 of Bile. Soon however, they lose this character, and then  
 consist entirely of the watery fluid above mentioned,  
 which is so extremely thin as to run thro' the deepest strand



without imparting to them the slightest stain. Occasionally it is perfectly limpid: but often assumes various hues & is frequently mixed with a little white mucus. These discharges are by no means uniform: varying almost daily in their appearance, but never appearing natural, being sometimes curdy & of a yellowish green, or, pasticoloured (as the nurses say, of all colours,) and slimy; & at other times of a yeasty colour. In this case, they often have a peculiarly unnatural & offensive odour. Frequently however, they have no smell, exhibiting the appearance of drink & aliment taken into the body; but, most generally they are sour, & are then said to resemble the washings of putrid meat. These discharges are very large & commonly very numerous, but as the disease assumes a more chronic form, they become less frequent. They are often accompanied by excessive pain arising from griping & cramps, & the spasms are sometimes so violent as to extend from the Abdomen to the extremities.

The appearance of the tongue is often natural; sometimes white, frequently mixed; in the early



stages, dry and hotish: In these more advanced, sometimes, without      The pulse, in the most part, is small, quick & chorded.

The temperature of the surface is extremely variable; the neck & head being often hot, while the extremities & the feet particularly are, 'internaturally cold'. An intense thirst attends the disease thro' all its stages, & water & other fluids swallowed are almost immediately rejected.

The few exhibible evidences, & a remitting tendency, & the exacerbations usually occur in the evenings.

With the general aëria, the brain sympathizes as is manifested by the stupor or insensibility which sometimes supervenes, and by the peculiar, lamed hollow half-closed appearance of the eyes which almost invariably attends.

The flesh & strength continue throughout the progress of the disease to waste away, whilst the body becomes swollen & not unfrequently augmented beyond its natural dimensions.

Thus great debility or complete prostration generally comes on with hasty strides, & the disorder in its usual form of violence commonly moves speedily, fatal. When it does



not at this stage a chronic character, & the absorption  
 of a final resolution tho' not it is certain, is more gradual.  
 There is at this stage of the complaint, great loss of  
 sensibility which indeed is so great that the child  
 will suffer thus to ever over its natural dissensibility with-  
 out manifesting any evidence of a consciousness of their  
 presence. Universal emaciation now reduces the little patient  
 to a mere skeleton, & then parts of the body which support  
 its weight alter, & then not only apparently appear  
 protruded thro' the labours of convulsions & the  
 Haemorrhagical, the almost certain mark of the last  
 stage, precede the fatal termination of this most  
 distressing malady.

Discrete as is apparently the condition of the patient in  
 this extremity, it is not necessary sometimes <sup>continues</sup> in this state  
 to consider in many cases and at length a too tedious  
 in it & distant state where symptoms sometimes alternately  
 elevated & depressed in the preceding way & at almost  
 extinguished life, finally recover.



The Causes of this disease like those which operate in the production of every other may be divided into Remote, Exciting & Proximate. Respecting the latter, I fully concur in the sentiment expressed in the celebrated aphorism of Gaubius, & therefore shall say nothing with regard to it.

As a remote cause capable of exciting a predisposition to an attack, I have already in a cursory manner mentioned the general & local debility produced by a vitiated state of the Atmosphere. The epidemics which annually visit most of our large towns, too well attest its fatal effects to require here a circumstantial detail.

Beside the state in which are brought about by the action of the causes formerly mentioned, I apprehend there may be a peculiar disposition in it, induced either by an abstraction of some of its common principles or the addition of new ones, or perhaps by some other change in its chemical qualities or Electrical condition, which rendering it an unnatural stimulus, generates in it a



calidity of acting in the system a predisposition to the  
 encephalitis. Should it be asked why these causes do at  
 this time produce a predisposition to disease only in our  
 man, I would answer in the words of Dr. Keen, "from  
 the diseases of the brain which generally introduce the disease,  
 from the morbid impressions on the brain which accom-  
 pany it, from its occasional nearness to the same time  
 with bilious humoral fever of adults, from disordered  
 & convulsed & a morbid action of the same disease. Its  
 appearance earlier in the season than the bilious and  
 humoral fever in adults, must be accounted to in an  
 action of children since more predisposed, & more  
 liable to be acted upon by the same causes which pro-  
 duce these diseases."

Great vicissitudes of heat & cold, as  
 well as long continued rain, succeeded in a season of  
 drought, are with the strictest propriety reckoned among  
 the causes of bilious & humoral fever, & are usually ranked  
 among the remote ones. These causes in the season not only



is this, but of other similar opinions are too obvious to be  
 tedious to us, and that must be said of them. It  
 is a well known fact, that there is a moment on the intimate association which  
 exists between the external surface & circumscription of parts of  
 one system, & another parts between it & the same system, and  
 their action well appears sufficiently corroborated. Experience  
 grounded on the most judicious observation completely proves  
 that no interaction can be made on one without various  
 influences almost immediately extended to the other.  
 • I knowledg of this fact that formerly, perhaps it has  
 not been the means of explaining mistakes & making  
 improvements in the treatment of many diseases has at  
 least explained some symptoms which even before not very  
 intelligible. For a full account of the nature & modes  
 of the causes above enumerated I have to  
 refer to the valuable work of "Gömmen on the Liver," in  
 which the sympathies of the skin with that organ and with  
 various other viscera are sketched out, & ingeniously  
 explained.



Among the sections of causes which writers fre-  
 quently enumerated, were many which however much con-  
 siderance was attached to them then, are now regarded  
 as exerting little influence. As it would be impossible  
 to mention every one which has been mentioned to  
 the consideration of the public, I will select a few  
 of those, the one which from the frequency of its operation  
 & the certainty of its effect, first attracts our attention to  
 itself. That the power of destroying "custom" be both  
 too frequent & irremediable, that this institution may in several  
 instances continue as long as the present dynasty, & that too have  
 no objection to be denied. Besides the power which has  
 been exercised in the hands of the Sultan, we have the testimony  
 of all the merchants & the many public authorities in the  
 Empire. Every one has seen the great number of the  
 Sultan, or rather of the Sultan's orders, which have been  
 not only issued, but have been distributed in the central districts  
 of the Empire, & which have been executed. There can then be no  
 doubt, that the institution of the Sultan is of great importance



them arise, a train of disordered actions the explanation  
 of which is certainly not very difficult. The communication  
 between the mouth & the stomach being a continuous passage,  
 the irritation & inflammatory action of the stomach direct-  
 ly extended to that organ producing in it as a necessary  
 consequence, a morbid & disordered action. This in its being pro-  
 duces similar results when the stomach is injured in other ways  
 cannot I believe more particularly. It is as we shall here-  
 after see in a disorder of the functions of these viscera,  
 that the disease we are treating is confined to the state  
 of them would it were to accompany this cause at any  
 season of the year, in the cold & winter as well as in  
 the heat of summer it would appear that something  
 must have at the same time with a local lesion and an  
 action of the kind mentioned, & circumstances that instead  
 of being confined to one season, it might appear at any.  
 It is as from my intuition & not here only and described  
 on this point, but I think it will not be denied that the  
 irritation of the stomach does occasionally even in winter



excite a disorder in every vessel analogous to Phlogistication.  
 & if debility of the stomach & general system be indu-  
 ced by any other causes than those usually considered the  
 predominate one & a susceptibility be there awakened.  
 I cannot conceive any thing, elation or any other  
 cause should not produce a development of the dis-  
 ease at this season as at any other. However, as  
 this is a matter of speculation more curious than  
 useful, it would be an unnecessary waste of words  
 to pursue it further.

Another exciting cause  
 is common occurrence & there are words of sense mentioned,  
 are imprinted in, & others. This is a subject which the  
 little regard is given to one of the highest importance.  
 In the doctor's own judgment, which he must  
 hold as his principle in this matter, have ever been  
 the kind of saccharine in them use & comfort to what  
 they consider their elegance. He is this man, they are  
 so much more to be used & then is justness to be exposed.



not only the same, but a very considerable portion  
 of the heat is lost. The excretion is copious. The  
 season at which Chinese Infants appear is not inter-  
 remarkable for a high range of atmospheric heat but in sud-  
 den transitions from heat to cold, especially in the evenings.  
 Thus then, the function of the Liver & Spleen inordinately  
 increased by the heat, has an onward march towards a  
 crisis in the excretion of water, a crisis which in a suc-  
 cessive manner is thus invaded, unless as we have mentioned  
 summatheologically, at the time of the Liver. The balance in  
 the circulation is then destroyed, & vitiated throughout  
 the portal & Mesenteric circuits (as, I have said, as a natural  
 result from a Law in the Economy,) the liver of the surface  
 & liver is immediately succeeded by an increased action  
 of the Stomach & Intestines. Hence it appears evident  
 that in this way disease may lay claim to disease the  
 avenues of the system, & it is obvious that, in the de-  
 cency of a thicker & more uniform covering, will be  
 found the explanation of its frequent occurrence in the



from under which we are considering it.

The last of the excellent causes which I shall mention, an irresistible in itself. These may consist either in fact or in involved qualities, or in the too great quantity of that which under ordinary circumstances is unobtrusive. When the Plethora becomes debilitated in the action, and in the same cause, it loses with its sensitive force the capacity of discharging the function which Nature has attached to it, viz: the great disposition of the materials destined to be fed & increased so as to be fit to the Body. When this aliment which is to its nature indigestible, or drawn from its superabundance & therefore is in this condition received into it, an impediment or at least a laborious effort is made at the due performance of its office. This increased exertion necessarily induces an excessive secretion, but this is in itself not seen till it is of lower & less moderate quantity. Hence, the resolution in the action & the exciting cause more effectual. But, the more that the Plethora



canal from its commencement to its termination, is a scottish surface. as we know when any given scottish surface is overexcited, the fluid secreted becomes unvalued in quantity a quality, being sometimes increased sometimes diminished, but always disordered. This is exemplified when the mucous membrane of the nose is acted upon, as in common cold. At first, the membrane is dry & sub inflamed, afterwards a more copious secretion than usual comes pouring forth, & at last acquires a quality as to excite the nose to sneeze themselves. So it is with the mucous membrane lining the stomach & bowels. When inordinately excited by the quality & quantity of the food & drink the secretions are irregular & morbid, & hence is generated a constant source of irritation in these important organs, a derangement of which forms the first link in the chain of morbid affections which constitute the disease.

In closing my remarks on the causes of Cholera Infantum, I think it proper to add that the division which has been made of them, tho' it wears the



an is transitive & active with & the sanction of exhortation will not always be found to be practically correct. A remote cause may & sometimes does act as an exciting cause, & vice versa, or, either may occasionally perform the part of both. These cases however must be considered only as exceptions which do not at all invalidate the general rule.

Examinations post mortem reveal to us many facts which are of the utmost importance, as they lead to the most beneficial practical results. They exhibit the alimentary canal always affected; and the violence of the disease is centred chiefly in the mucous membrane of the small Intestines. Throughout their whole tract they evince the presence of the inflammatory action in all its various stages of gradation, from the simplest blush to its final termination in sphacelus. By an effusion of coagulable lymph, an attempt is sometimes made to relieve itself, & in this case the calibre of the canal is then much diminished. The large Intestines are usually



lup affected. The Peritoneum sometimes exhibits traces of inflammation. The Liver is found unaltered in its structure, but grossly enlarged in its dimensions: it when cut into, proves to be completely engorged with blood. The Gall-bladder is commonly distended with dark green, & sometimes with colourless bile. The other viscera of the abdomen present a healthy appearance; those of the Thorax are never at all affected. In recent cases, the Brain exhibits no marked lesions: but, in those of a chronic character, an indurated condition is observable & there is often found an effusion of water in its ventricles.

From the phenomena which attend the disease, and from the symptoms which characterize Chorea Stransia, is derived the knowledge we possess of its pathology. This subject has reached the height of its importance & too extensive to be completely embraced within the narrow limits of an Inaugural Essay. I have therefore, without descending to the minutiae in detail, attempted to give only in a general way some account of its history.



To render this more intelligible it will not I think be improper to take a hasty physiological view of the organs principally concerned. The changes which the aliment undergoes may be divided into three kinds, to wit, Digestion, Chylification & what is termed Faculent separations. The first is performed in the Stomach by means of the Succus Gastricus; the second in the Duodenum & small Intestines. Soon after the food has passed out of the Stomach, during its stay in which it is converted into a viscus semitransparent fluid called Chyme, it is joined by the proper secretions of the Pancreas & Liver. These uniting with it, separate some of its principles & combine with others, forming the same animalised fluid denominated Chyle, which in its passage onwards is taken up by the lacteals & by them conveyed into the general circulation. The unrecipitated portion forced downwards, gets into the large Intestines & thro' them passes to be ejected in the form of excrementitious matter.

The organs which carry on these processes, united in the



Social ties of relationship, are rendered accordant and co-  
 operative by means of a nervous connexion, which for  
 want of a better term is denominated Sympathy. By  
 its agency, the quantity of fluids secreted & the periods  
 of their secretion, are adjusted. Food in the mouth ex-  
 cites by its own impression the action of the salivary glands;  
 and by the same proper stimulus the gastric juices are  
 elaborated. "But as the Liver & Pancreas lie out of the  
 reach of direct stimulation, they must be excited into  
 action by an indirect impulse communicated from  
 the Stomach. Now, when any one of these functions be-  
 comes deranged, others are liable to be thrown into dis-  
 order. Thus the Stomach may be affected by a cause  
 applied directly to it, & a corresponding derangement  
 be thereby induced in the Liver; or, it may become  
 so from a complaint commencing in the latter organ.  
 In practice, it is certainly no easy matter to say in  
 which the complaint does originate. But in the case  
 before us, from a consideration of the history of its symp-



Louis & cause, now is the best reason to believe that the primary  
 affection is confined to the Stomach. This is then secondarily ex-  
 tended to the other portions of the Alimentary Canal, & as  
 the impulsion soon communicated to the Liver? When the  
 stimulus of the irritation then induced is at first moderately  
 great, the immediate consequence is an increased vigour  
 in the function of the gland, & a copious secretion of Bile.  
 is the result. This, as has been said, is observable in the  
 early stage of the disease. But when the stimulus is  
 longer continued it is from the beginning & a time, the  
 secretory action instead of being increased is diminished or  
 completely arrested. This is remarkable in the subsequent  
 stages when the symptoms uniformly indicate a depression of  
 the. Under these circumstances the Blood sent to the  
 Liver is the result of the partial coagulability of the  
 tubulum of its secretion finding no outlet becomes  
 its course obstructed, & a tension or distension of its branches  
 is the necessary consequence. This constitutes the Obstruc-  
 tive condition of the Liver which is always found in



best medical examinations.

When the state of things now indicated, it is then, that our disease chiefly depends; & it is evident, that altho' the Hætic disorder may have been caused by a similar one in the Stomach, not that this by a kind of remote sympathy may not only keep up, but even aggravate the one which naturally produces it.

Among the sympathies by which the Fever is connected with other parts, one of the most remarkable is that in which the Brain is concerned. By it, is to be explained the embroilment made upon that organ, causing in it inflammation & as its consequence Hydrocic effusions, constituting what, as has been said is in protracted cases so often found, namely, *Hydrocephalus Internus*.

The treatment of Cholera Spasmodicum formerly resorted mostly to the exhibition of warm remedies, since the more recent symptoms seemed to call for a more powerful depletion has given place to practice founded on more or less of phlebotomy. Instead of



Prescriptions in some of these cases, the intelligent physician aided by his knowledge of its pathology, is now accustomed to seek back to original causes, & in removing them or in moderating their effects maintains us in success.

Respects the treatment which particular symptoms demand, the general indications in the case appear to be, to allay the vomiting & dyspepsia, to cruet the stomach & remove the congestive state of the liver, to excite the Biliary & other morbid secretion, to soften or avoid the causes & to invigorate the system.

The first indication is generally answered by getting rid of the depending matter. This is usually effected by the administration of a dose of castor oil, either alone or combined with a small portion of Laudanum. In the milder cases this practice may answer very well; but when the vomiting is very excessive, even when medicines cannot be retained sufficiently long to produce their desired effects, in that case, our first resort must be to abate the excess of action & restore despatch, by recourse to other measures.



Among these may be mentioned as particularly useful, equal  
 parts of lime-water & milk, a strong infusion of Coffee  
 without cream or sugar; either with the Opere-cinadran-  
 ght anodyne enemata; fermentations in the sea bag, or stu-  
 plasters to the Epigastrium; the warm bath &c. When  
 however the Liver has felt the influence of these it is reason-  
 able to believe its excited action augments the violence of the  
 gastric affection, the most certainly effectual means of  
 calming its irritation, is Calomel exhibited in the minutest  
 doses such the 10<sup>th</sup> & 15<sup>th</sup> or even the 10<sup>th</sup> of a grain.

Having by these means succeeded in quieting the stomach  
 an attempt should next be made to evacuate the Bile.  
 In the selection of the medicine most proper for this  
 purpose, there may be some choice. Castor Oil is commonly  
 preferred but Calomel combined with Opium is perhaps  
 better as it is not apt to be rejected but operates well, &  
 effectually stops any spasmodic action which may happen  
 to excite. This treatment however will not be found uni-  
 formly applicable; for says Dr. Cullen "when there are



besides the acute uneasiness & vomiting great, from about  
the Umbilicus to a point, irritated, pulse, it becomes ne-  
cessary to prescribe an Emetic. It may be useful even in  
the subsequent stages not isocholically, at the commencement  
of an attack, when by cleansing the stomach of the mucus  
secretion which is then always found in it, the consequent  
irritation is thereby apparently cut off.

From a consideration of the Pathology  
of Cholera Infantum, it is evident that while the irrita-  
tion & derangement of the Hepatic apparatus continues, all  
our remedies, either ad dropped to the alimentary canal or  
applied in any other way, must be considered as palliatives  
only. It becomes necessary therefore early to attend to the  
second Indication. Among the remedies whose operations af-  
fect the Liver, the only one which can be said to exert a  
specific action on it, is Mercury. This remedy has the  
extraordinary, but now well known power (mentioned first  
it is said, by A. Sydenham in his treatise on Marasmus)  
of increasing its secretion when depressed, & of restraining



it when excessive. To attain the former, or exact, what  
 in this case is desirable: for if we can renew the secretory  
 function of the glands, we restore its healthy action, and  
 thereby not only get rid of the congestion, but alter the  
 diseased impression of the external surface depending  
 upon its derangement. The preparation of Mercury chosen  
 for this purpose is the sub-muriate, which should be given  
 in doses so regulated as to obtain its specific action, and  
 to produce an alterative effect only. When thus adminis-  
 tered & its use persevered in, it never fails to bring down  
 a free discharge of yellow bile, the appearance of which  
 should be hailed as the most auspicious omen.

During the continuance of the disease, there will be as its  
 necessary consequence, increased accumulations of morbid  
 matter in the intestines. As these would but increase the  
 irritation & aggravate the violence of the complaint,  
 it becomes proper that they should, from time to time be  
 evacuated. This may be effected either by purgatives  
 or enemata, directed by some one of the several parts, or



by the latter medicine alone, is a weaker del. *Mucosa*  
 sia &c. It is recommended, very properly, that the purg-  
 ing be not carried too far; lest the irritation already too  
 great be both continued & augmented. The medicine  
 therefore should be so administered as to produce an  
 evacuant effect merely. It would perhaps be well if we  
 could dispense with the employment of Cathartics in these  
 cases altogether; but as the injurious results of their over-  
 action, are more sufferable than the effects of an over-  
 stimulation of the morbid secretions which they are intend-  
 ed to remove, it becomes a matter of prudence of the  
 two evils to choose the least. "Calomel" says Dr. Miller  
 "is more especially indicated in that form of the disease  
 where a *Tenesmus* accompanies a *Diarrhea*. In these  
 cases, a repetition is most necessary, & when combined with  
 Opium, it seems to possess a specific property."

Cincher in every stage of the complaint have  
 been highly recommended by Dr. Mann of Massachusetts.  
 In the beginning, as evacuant & later on sometimes



undoubtedly useful, & at a subsequent period in the influence they exert over the Liver will frequently prove beneficial.

To combat the system as well as a symptomatic remedy against inflammation, Antiseptic in the commencement of an attack has been advised by the best authorities.

In consequence, however of the sudden prostration which is liable to ensue the Linct should be resorted to with the greatest circumspection.

To correct acidity, minute doses of Magn. Nst. or a solution of a carbonate of either of the fixed alkalis will be found exceedingly useful.

The inequality in the temperature of the surface depends, in most commonly on the Hæmorrhagic derangement, and generally disappears when that is removed (cannot be permanently remedied before. Temporary relief may however be obtained by the repeated use of the warm bath, which is rendered more beneficial, perhaps, by the addition of Salt, Mustard, Pepper or Brandy. To



allay pain it is still more valuable.

By the action of their counter stimulation, Disorders of the  
 Oesophagus are highly important. They are more, than of  
 moderate inflammation & are useful at every stage  
 of the disease.

When the Diarrhoea is accompanied by *Formica*  
*Tenaxus*, doses of the Colicous or Testaceous pulp  
 are necessary to restrain the discharge, & consistent  
 anodyne injections will be demanded for the relief  
 of the latter symptoms.

Simple, profuse Diarrhoea arising from mere relax-  
 ation & debility of the Bowels, is in general successfully  
 treated by Astringents. Among these may be reckoned  
 Gum, Colicera, Bark, Citric Acid, Tinct. Cale-  
 chu, *Geranium maculatum*, the least & the richest  
 Rhubarb, the infusion of Galls, of Logwood &c.

What however is in most instances preferable to either  
 of these is an infusion of the Rowberry root, or, a  
 decoction of the rind of the Pomegranate in new milk.



To most of these remedies Laudanum may be added with the greatest advantage. The Turbithenals, preparations have been highly extolled, & common. Resin is said to be sometimes very effectual in restraining the mucous discharges.

As soon removed of the complaint, the clothing of the child should be strictly attended to. Its body & extremities ought to be completely covered by fine flannel or finey nicoerys well fitted & accurately adjusted. The flannel Roller as first recommended by Dr. Chapman & now commonly used in Dysentery should prove here highly beneficial. It is almost superfluous to add that a scrupulous regard to cleanliness is imperiously demanded. The diet too demands attention. If the child be weaned his food should consist of the lightest & most digestible articles, such as rice, Farina Arrow root &c. &c. with a frequent repetition of new milk. In giving the child care is required lest its Stomach be overloaded & oppressed by too great a quantity. Chocolate, Coffee, Sops, &c.

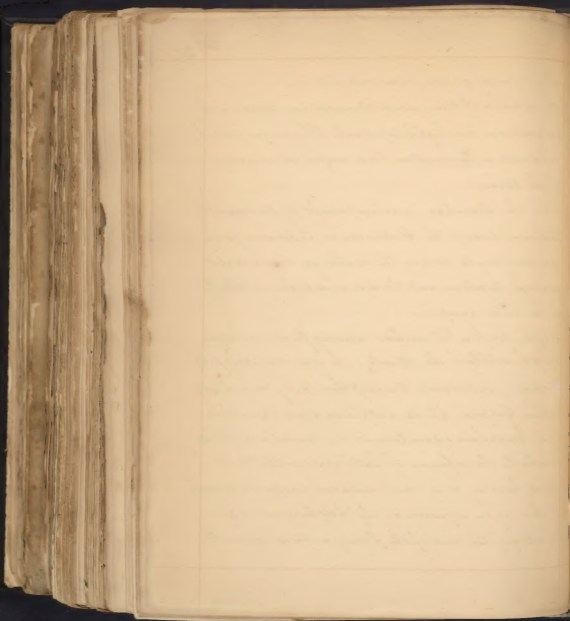


a general rule, fruit & meats of every kind are inad-  
missible.

Whatever be our exertions however judi-  
cious our treatment, they will often prove ineffectual as  
long as the cause which produces the disease continues  
to operate. Attention therefore should be early paid to  
their removal. If the patient live in a city, he should be  
immediately taken to the country. When this advantage  
cannot be commanded, a frequent change of air with  
exercise, as by riding in an open carriage, or by the motion  
of a boat as in rowing or sailing, is highly serviceable.

When the progress of the disease  
has been arrested by the measures I have here attempted to  
indicate, the cure must be completed & health reestablished  
by the usual corroborant means; of these I would recom-  
mend as exceedingly efficacious a cold infusion of Red bark  
& Virginia Snake-root.

In conclusion it only remains  
for me to mention the means by which the disease is to be



avoided. A knowledge of its history teaches very explicitly its Prophylaxis. The most important preventives appear to be the following: 1<sup>st</sup> Imparting tone & vigour to the system by the daily use of the cold bath. 2<sup>nd</sup> Attention to change the dresses of children with the changes in the weather: always having them sufficiently warm. 3<sup>rd</sup> Attention to diet. The proper food for an infant, is its mother's milk; it should therefore not be weaned within the year. When children have left the breast, they should be fed on milk & on farinaceous vegetables boiled, and occasionally allowed a small portion of salted animal food. 4<sup>th</sup> Attention to the progress of dentition. The gums should be often examined, & when they are swollen & produce much pain, they should be lanced; & the incision be made deep enough to penetrate the capsule. 5<sup>th</sup> Attention to cleanliness. 6<sup>th</sup> Above all, the removal of children to the Country on the approach of warm weather.

